

Sentinel Well Project
Attachment 6 - Budget

| Table 3 - Budget | | | | | | |
|---|--|--------------------------------------|----------------------------|------------------------------------|------------------|-----------------|
| Project Title: West Valley Water District Sentinel Well Project | | | | | | |
| Budget Category* | | (a) | (b) | (c) | (d) | (e) |
| | | Non-State Share** (Funding Match) | Requested Grant Funding | Other State Funds Being Used | Total | % Funding Match |
| (a) | Direct Project Administration Costs - assume 5% of total budget ⁽¹⁾ | \$0 | \$10,000 | \$0 | \$10,000 | 0% |
| (b) | Land Purchase/Easement ⁽¹⁾ | \$0 | \$8,000 | \$0 | \$8,000 | 0% |
| (c) | Planning/Design/Engineering/ Environmental Documentation ^(2, 3) | \$0 | \$22,400 | \$0 | \$22,400 | 0% |
| (d) | Construction/Implementation ⁽³⁾ | \$273,300 | \$189,600 | \$0 | \$462,900 | 59% |
| (e) | Environmental Compliance/ Mitigation/Enhancement | \$0 | N/A | \$0 | \$0 | 0% |
| (f) | Construction Administration | \$0 | \$0 | \$0 | \$0 | 0% |
| (g) | Other Costs (Program Management & Monitoring Requirements) | \$0 | \$0 | \$0 | \$0 | 0% |
| (h) | Construction/Implementation Contingency - 10% | \$26,200 | \$20,000 | \$0 | \$46,200 | 57% |
| (i) | Grand Total (Sum rows (a) through (h) for each column) | \$299,500 | \$250,000 | \$0 | \$549,500 | 55% |
| (1) Cost NOT included in engineer's cost estimate. (2) Includes permitting costs. (3) See Engineer's Cost Estimate for Details. * For each budget category, supplemental detailed cost explanations are provided in Att6_LGA12_WestValleyWD_BUDGET_2of2.pdf . **List sources of funding: District's general funds. | | | | | | |

DETAILED COST ESTIMATE WORKSHEET 2012Client: West Valley Water DistrictProject: Sentinel Well Installation for Rialto Well No. 6

Proposal/Project No.: _____

Summary of All TasksDate: 7/13/12 Rev. #: 0Rate Schedule: See below.**Cost Estimate Summary**

| | | | | | |
|--------------|-----|-------------|-----------|-------------------|----------------|
| Labor | 879 | Total Hours | \$ | 136,755.00 | 25.73% |
| Subs | | | \$ | 337,150.00 | 63.42% |
| ODCs | | | \$ | 11,467.50 | 2.16% |
| Contingency | 10% | | \$ | 46,216.25 | 8.69% |
| Total | | | \$ | 531,588.75 | 100.00% |

Labor Dollars/Manhour: \$156

Note: Start with new sheet for each project.
Contact Jay Knight with improvement suggestions.

Notes: Budgetary Estimates for Grant

Approved by: _____

Cost Estimate Summary

| Labor Hours | | | | | | | | | | |
|------------------------------------|-------|-------------------|----------------------|-----------|-----------------------------------|--------------------------|---|---------------------------------|-------------------------|-------|
| Staff Member | Rate | Project Tasks | | | | | | | | Total |
| | | Task a | Task c | Task c | Task c | Task d | Task d | Task d | Task e | |
| | | (a) Project Admin | (c.7) CEQA Exemption | (c.5) BDM | (c.6) Drilling Contract Documents | (d.9) Bidding Assistance | (d.10.1 thru d.10.6) Construction Phase | (d.10.7) Well Completion Report | Surveillance Monitoring | |
| (ES9) Senior Principal | \$240 | - | - | - | - | - | - | - | - | - |
| (ES8) Principal Engineer-Scientist | \$235 | - | - | 16 | 12 | 12 | 30 | 16 | - | 86 |
| (ES7) Senior Engineer-Scientist | \$225 | - | 1 | - | - | - | - | - | - | 1 |
| (ES6) Senior Associate Eng-Sci | \$200 | - | - | - | - | - | - | - | - | - |
| (ES5) Associate Eng-Scientist | \$180 | - | - | 20 | 16 | 16 | 92 | 32 | - | 176 |
| (ES4) Engineer-Scientist | \$165 | - | - | - | - | - | - | - | - | - |
| (ES3) Senior Staff Eng-Scientist | \$150 | - | - | - | - | - | 256 | 60 | - | 316 |
| (ES2) Staff Engineer-Scientist | \$130 | - | 4 | 16 | 20 | 10 | - | - | - | 50 |
| (ES1) Engineer-Scientist 1 | \$125 | - | - | - | - | - | - | - | - | - |
| Designer/Senior Tech. | \$135 | - | - | 12 | 12 | 12 | 144 | 12 | - | 192 |
| (CAD-Tech.) Drafter/Technician | \$105 | - | - | - | - | - | - | - | - | - |
| Project Administrator | \$95 | - | - | - | - | - | 12 | - | - | 12 |
| (Admin. Asst.) Word Processor | \$80 | - | - | 4 | 2 | 2 | 30 | 8 | - | 46 |
| (Aide) Non-Technical | \$60 | - | - | - | - | - | - | - | - | - |
| Total Labor Hours by Task | | 0 | 5 | 68 | 62 | 52 | 564 | 128 | 0 | 879 |

| Labor Cost | | | | | | | | | | |
|------------------------------------|--------|-------------------|----------------------|--------------|-----------------------------------|--------------------------|---|---------------------------------|-------------------------|---------------|
| Staff Member | Rate | Project Tasks | | | | | | | | Total |
| | | Task a | Task c | Task c | Task c | Task d | Task d | Task d | Task e | |
| | | (a) Project Admin | (c.7) CEQA Exemption | (c.5) BDM | (c.6) Drilling Contract Documents | (d.9) Bidding Assistance | (d.10.1 thru d.10.6) Construction Phase | (d.10.7) Well Completion Report | Surveillance Monitoring | |
| (ES9) Senior Principal | \$ 240 | - | - | - | - | - | - | - | - | \$ - |
| (ES8) Principal Engineer-Scientist | \$ 235 | - | - | \$ 3,760.00 | \$ 2,820.00 | \$ 2,820.00 | \$ 7,050.00 | \$ 3,760.00 | - | \$ 20,210.00 |
| (ES7) Senior Engineer-Scientist | \$ 225 | - | \$ 225.00 | - | - | - | - | - | - | \$ 225.00 |
| (ES6) Senior Associate Eng-Sci | \$ 200 | - | - | - | - | - | - | - | - | \$ - |
| (ES5) Associate Eng-Scientist | \$ 180 | - | - | \$ 3,600.00 | \$ 2,880.00 | \$ 2,880.00 | \$ 16,560.00 | \$ 5,760.00 | - | \$ 31,680.00 |
| (ES4) Engineer-Scientist | \$ 165 | - | - | - | - | - | - | - | - | \$ - |
| (ES3) Senior Staff Eng-Scientist | \$ 150 | - | - | - | - | - | \$ 38,400.00 | \$ 9,000.00 | - | \$ 47,400.00 |
| (ES2) Staff Engineer-Scientist | \$ 130 | - | \$ 520.00 | \$ 2,080.00 | \$ 2,600.00 | \$ 1,300.00 | - | - | - | \$ 6,500.00 |
| (ES1) Engineer-Scientist 1 | \$ 125 | - | - | - | - | - | - | - | - | \$ - |
| Designer/Senior Tech. | \$ 135 | - | - | \$ 1,620.00 | \$ 1,620.00 | \$ 1,620.00 | \$ 19,440.00 | \$ 1,620.00 | - | \$ 25,920.00 |
| (CAD-Tech.) Drafter/Technician | \$ 105 | - | - | - | - | - | - | - | - | \$ - |
| Project Administrator | \$ 95 | - | - | - | - | - | \$ 1,140.00 | - | - | \$ 1,140.00 |
| (Admin. Asst.) Word Processor | \$ 80 | - | - | \$ 320.00 | \$ 160.00 | \$ 160.00 | \$ 2,400.00 | \$ 640.00 | - | \$ 3,680.00 |
| (Aide) Non-Technical | \$ 60 | - | - | - | - | - | - | - | - | \$ - |
| Total Labor Cost by Task | | \$ - | \$ 745.00 | \$ 11,380.00 | \$ 10,080.00 | \$ 8,780.00 | \$ 84,990.00 | \$ 20,780.00 | \$ - | \$ 136,755.00 |

Cost Estimate Summary

| Subs and ODCs | | | | | | | | | | |
|--------------------------------------|---------|-----------------------------|-----------------------------------|---------------------|--|---------------------------------------|--|--|--------------------------------------|---------------|
| Markup Rate | | 10.0% | Project Tasks | | | | | | | Total |
| Description | Sub/ODC | Task a (a) Project Admin | Task c (c.7) CEQA Exemption | Task c (c.5) BDM | Task c (c.6) Drilling Contract Documents | Task d (d.9) Bidding Assistance | Task d (d.10.1 thru d.10.6) Construction Phase | Task d (d.10.7) Well Completion Report | Task e Surveillance Monitoring | |
| Utility Clearance | Sub | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 2,000.00 | \$ - | \$ - | \$ 2,000.00 |
| Drilling and Sampling | Sub | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 269,000.00 | \$ - | \$ - | \$ 269,000.00 |
| Land Surveying | Sub | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 2,000.00 | \$ - | \$ - | \$ 2,000.00 |
| Lab Analysis | Sub | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 2,500.00 | \$ - | \$ - | \$ 2,500.00 |
| | Sub | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Downhole Geophysics | Sub | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 6,000.00 | \$ - | \$ - | \$ 6,000.00 |
| Waste Disposal | Sub | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 25,000.00 | \$ - | \$ - | \$ 25,000.00 |
| Field Equipment Rental | ODC | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 5,500.00 | \$ - | \$ - | \$ 5,500.00 |
| Field Supplies | ODC | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 2,000.00 | \$ - | \$ - | \$ 2,000.00 |
| Permit Fees/ Agency Fees | ODC | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,000.00 | \$ - | \$ - | \$ 1,000.00 |
| | ODC | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Reproduction/Communications | ODC | \$ - | \$ 50.00 | \$ 50.00 | \$ 100.00 | \$ 50.00 | \$ 375.00 | \$ 250.00 | \$ - | \$ 875.00 |
| | ODC | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Markup | | \$ - | \$ 5.00 | \$ 5.00 | \$ 10.00 | \$ 5.00 | \$ 31,537.50 | \$ 25.00 | \$ - | \$ 31,587.50 |
| Auto Mileage (enter estimated miles) | | 0 | 0 | 0 | 0 | 0 | 2100 | 0 | 0 | 2100 |
| Mileage Reimbursement rate: | \$0.55 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,155.00 | \$ - | \$ - | \$ 1,155.00 |
| Total Subs | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 337,150.00 | \$ - | \$ - | \$ 337,150.00 |
| Total ODCs | | \$ - | \$ 55.00 | \$ 55.00 | \$ 110.00 | \$ 55.00 | \$ 10,917.50 | \$ 275.00 | \$ - | \$ 11,467.50 |
| Total Subs and ODCs by Task | | \$ - | \$ 55.00 | \$ 55.00 | \$ 110.00 | \$ 55.00 | \$ 348,067.50 | \$ 275.00 | \$ - | \$ 348,617.50 |

| Lab Analysis Detail | | | | | | | | | | |
|----------------------------------|--------|-------------------|-----------------------------------|---------------------|--|---------------------------------------|---|--|--------------------------------------|-------------|
| Analysis | Rate | Project Tasks | | | | | | | | Total |
| | | Task a | Task c (c.7) CEQA Exemption | Task c (c.5) BDM | Task c (c.6) Drilling Contract Documents | Task d (d.9) Bidding Assistance | Taskd (d.10.1 thru d.10.6) Construction Phase | Task d (d.10.7) Well Completion Report | Task e Surveillance Monitoring | |
| Orange Coast Analytical 3/05 | | (a) Project Admin | | | | | | | | |
| TRPH 418.1 | \$ 75 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8015 gas | \$ 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8015 Total Carbon Chain | \$ 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VOCs 8260 | \$ 125 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 20 |
| PAHs (8100/8310) | \$ 135 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BTEX 8021B (+/- MTBE) | \$ 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SVOCs 8270 | \$ 250 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PCBs 8082 | \$ 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pesticides Organochlorine 8081 | \$ 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pesticides Organophosphorus 8141 | \$ 175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CAM Metals (6010/7470/7471) | \$ 140 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Lab by Task | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 2,500.00 | \$ - | \$ - | \$ 2,500.00 |

Cost Estimate Summary

| Task Totals, Contingencies and Rounding | | Project Tasks | | | | | | | | Total |
|--|----------|-------------------|----------------------|--------------|-----------------------------------|--------------------------|---|---------------------------------|-------------------------|---------------|
| | | Task a | Task c | Task c | Task c | Task d | Taskd | Task d | Task e | |
| | | (a) Project Admin | (c.7) CEQA Exemption | (c.5) BDM | (c.6) Drilling Contract Documents | (d.9) Bidding Assistance | (d.10.1 thru d.10.6) Construction Phase | (d.10.7) Well Completion Report | Surveillance Monitoring | |
| Labor Total | | \$ - | \$ 745.00 | \$ 11,380.00 | \$ 10,080.00 | \$ 8,780.00 | \$ 84,990.00 | \$ 20,780.00 | \$ - | \$ 136,755.00 |
| Communications Fee (on labor) 0% | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Subs Total | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 337,150.00 | \$ - | \$ - | \$ 337,150.00 |
| ODC Total | | \$ - | \$ 55.00 | \$ 55.00 | \$ 110.00 | \$ 55.00 | \$ 10,917.50 | \$ 275.00 | \$ - | \$ 11,467.50 |
| Task Total | | \$ - | \$ 800.00 | \$ 11,435.00 | \$ 10,190.00 | \$ 8,835.00 | \$ 433,057.50 | \$ 21,055.00 | \$ - | \$ 485,372.50 |
| Contingency Percentage | | 0% | 15% | 10% | 10% | 10% | 9% | 10% | 0% | |
| Contingency Amount | | \$ - | \$ 120.00 | \$ 1,143.50 | \$ 1,019.00 | \$ 883.50 | \$ 40,944.75 | \$ 2,105.50 | \$ - | \$ 46,216.25 |
| Adjusted Task Total | | \$ - | \$ 920.00 | \$ 12,578.50 | \$ 11,209.00 | \$ 9,718.50 | \$ 474,002.25 | \$ 23,160.50 | \$ - | \$ 531,588.75 |
| Round to nearest: (enter 0.01, 0.1, 1, 10, 100, 1000) | \$100.00 | \$ - | \$ 900.00 | \$ 12,600.00 | \$ 11,200.00 | \$ 9,700.00 | \$ 474,000.00 | \$ 23,200.00 | \$ - | \$ 531,600.00 |

CHANGE ON SUMMARY SHEET ONLY

DO NOT CHANGE 1/1 OR 1/3/04 NUMBERS - ONLY CUSTOM

| | Standard | Custom |
|------------------------------------|----------|----------|
| Labor Categories | | 1/1/2012 |
| (ES9) Senior Principal | | \$240 |
| (ES8) Principal Engineer-Scientist | | \$235 |
| (ES7) Senior Engineer-Scientist | | \$225 |
| (ES6) Senior Associate Eng-Sci | | \$200 |
| (ES5) Associate Eng-Scientist | | \$180 |
| (ES4) Engineer-Scientist | | \$165 |
| (ES3) Senior Staff Eng-Scientist | | \$150 |
| (ES2) Staff Engineer-Scientist | | \$130 |
| (ES1) Engineer-Scientist 1 | | \$125 |
| Designer/Senior Tech. | | \$135 |
| (CAD-Tech.) Drafter/Technician | | \$105 |
| Project Administrator | | \$95 |
| (Admin. Asst.) Word Processor | | \$80 |
| (Aide) Non-Technical | | \$60 |
| Direct Expenses | | 10% |
| Communications Fee (on labor) | | 0% |
| Mileage | | \$0.55 |

DETAILED COST ESTIMATE WORKSHEET 2012

Client: West Valley Water District

Project: Sentinel Well Installation for Rialto Well No. 6

Proposal/Project No.: _____

Task d: (d.10.1 thru d.10.6) Con
Construction Tasks

Date: 7/13/12 Rev. #: 0

Rate Schedule: See below.

0
of these dates or a custom date and go to cell E140.)

Cost Estimate Summary

| | | | | | |
|--------------|-----|-------------|-----------|-------------------|----------------|
| Labor | 564 | Total Hours | \$ | 84,990.00 | 17.93% |
| Subs | | | \$ | 337,150.00 | 71.13% |
| ODCs | | | \$ | 10,917.50 | 2.30% |
| Contingency | 10% | | \$ | 40,944.75 | 8.64% |
| Total | | | \$ | 474,002.25 | 100.00% |

Labor Dollars/Manhour: \$151

Notes: _____

Approved by: _____

Cost Estimate (d.10.1 thru d.10.6)

| Labor Hours | | | | | | | | |
|------------------------------------|-------|------------------|-------------|-------------------|-------------|--------------------------------------|-----------------------------|-------|
| Staff Member | Rate | Project Tasks | | | | | | |
| | | Task d.10.1 | Task d.10.2 | Task d.10.3 | Task d.10.4 | Task d.10.5 | Task d.10.6 | Total |
| | | Pre Construction | Drilling | Well Installation | Development | Wellhead Completion and Improvements | Construction Administration | |
| (ES9) Senior Principal | \$240 | | | | | | | - |
| (ES8) Principal Engineer-Scientist | \$235 | | | | | | 30 | 30 |
| (ES7) Senior Engineer-Scientist | \$225 | | | | | | | - |
| (ES6) Senior Associate Eng-Sci | \$200 | | | | | | | - |
| (ES5) Associate Eng-Scientist | \$180 | | | | | | 92 | 92 |
| (ES4) Engineer-Scientist | \$165 | | | | | | | - |
| (ES3) Senior Staff Eng-Scientist | \$150 | 16 | 240 | | | | | 256 |
| (ES2) Staff Engineer-Scientist | \$130 | | | | | | | - |
| (ES1) Engineer-Scientist 1 | \$125 | | | | | | | - |
| Designer/Senior Tech. | \$135 | | | 60 | 60 | 24 | | 144 |
| (CAD-Tech.) Drafter/Technician | \$105 | | | | | | | - |
| Project Administrator | \$95 | 4 | 2 | 2 | 2 | 2 | | 12 |
| (Admin. Asst.) Word Processor | \$80 | 6 | 6 | 6 | 6 | 6 | | 30 |
| (Aide) Non-Technical | \$60 | | | | | | | - |
| Total Labor Hours by Task | | 26 | 248 | 68 | 68 | 32 | 122 | 564 |

| Labor Cost | | | | | | | | |
|------------------------------------|--------|------------------|--------------|-------------------|-------------|--------------------------------------|-----------------------------|--------------|
| Staff Member | Rate | Project Tasks | | | | | | |
| | | Task d.10.1 | Task d.10.2 | Task d.10.3 | Task d.10.4 | Task d.10.5 | Task d.10.6 | Total |
| | | Pre Construction | Drilling | Well Installation | Development | Wellhead Completion and Improvements | Construction Administration | |
| (ES9) Senior Principal | \$ 240 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| (ES8) Principal Engineer-Scientist | \$ 235 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 7,050.00 | \$ 7,050.00 |
| (ES7) Senior Engineer-Scientist | \$ 225 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| (ES6) Senior Associate Eng-Sci | \$ 200 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| (ES5) Associate Eng-Scientist | \$ 180 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 16,560.00 | \$ 16,560.00 |
| (ES4) Engineer-Scientist | \$ 165 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| (ES3) Senior Staff Eng-Scientist | \$ 150 | \$ 2,400.00 | \$ 36,000.00 | \$ - | \$ - | \$ - | \$ - | \$ 38,400.00 |
| (ES2) Staff Engineer-Scientist | \$ 130 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| (ES1) Engineer-Scientist 1 | \$ 125 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Designer/Senior Tech. | \$ 135 | \$ - | \$ - | \$ 8,100.00 | \$ 8,100.00 | \$ 3,240.00 | \$ - | \$ 19,440.00 |
| (CAD-Tech.) Drafter/Technician | \$ 105 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Project Administrator | \$ 95 | \$ 380.00 | \$ 190.00 | \$ 190.00 | \$ 190.00 | \$ 190.00 | \$ - | \$ 1,140.00 |
| (Admin. Asst.) Word Processor | \$ 80 | \$ 480.00 | \$ 480.00 | \$ 480.00 | \$ 480.00 | \$ 480.00 | \$ - | \$ 2,400.00 |
| (Aide) Non-Technical | \$ 60 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Total Labor Cost by Task | | \$ 3,260.00 | \$ 36,670.00 | \$ 8,770.00 | \$ 8,770.00 | \$ 3,910.00 | \$ 23,610.00 | \$ 84,990.00 |

| Subs and ODCs | | | | | | | | | | |
|--------------------------------------|---------|------------------|---------------|-------------------|--------------|-------------------------|-----------------------------|------|---------------|-------|
| Markup Rate | | 10.0% | Project Tasks | | | | | | | Total |
| Description | Sub/ODC | Task d.10.1 | Task d.10.2 | Task d.10.3 | Task d.10.4 | Task d.10.5 | Task d.10.6 | - | | |
| | | Pre Construction | Drilling | Well Installation | Development | Wellhead Completion and | Construction Administration | - | | |
| Utility Clearance | Sub | \$ 2,000.00 | | | | | | | \$ 2,000.00 | |
| Drilling and Sampling | Sub | | \$ 99,500.00 | \$ 97,500.00 | \$ 12,000.00 | \$ 60,000.00 | | | \$ 269,000.00 | |
| Land Surveying | Sub | | | | \$ 2,000.00 | | | | \$ 2,000.00 | |
| Lab Analysis | Sub | \$ - | \$ 2,500.00 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 2,500.00 | |
| 0 | Sub | | | | | | | | \$ - | |
| Downhole Geophysics | Sub | | \$ 6,000.00 | | | | | | \$ 6,000.00 | |
| Waste Disposal | Sub | | \$ 15,000.00 | | \$ 10,000.00 | | | | \$ 25,000.00 | |
| Field Equipment Rental | ODC | | \$ 3,500.00 | \$ 1,000.00 | \$ 1,000.00 | | | | \$ 5,500.00 | |
| Field Supplies | ODC | | \$ 1,000.00 | \$ 500.00 | \$ 500.00 | | | | \$ 2,000.00 | |
| Permit Fees/ Agency Fees | ODC | \$ 1,000.00 | | | | | | | \$ 1,000.00 | |
| 0 | ODC | | | | | | | | \$ - | |
| Reproduction/Communications | ODC | \$ 50.00 | \$ 100.00 | \$ 75.00 | \$ 75.00 | \$ 75.00 | | | \$ 375.00 | |
| 0 | ODC | | | | | | | | \$ - | |
| Markup | | \$ 305.00 | \$ 12,760.00 | \$ 9,907.50 | \$ 2,557.50 | \$ 6,007.50 | \$ - | \$ - | \$ 31,537.50 | |
| Auto Mileage (enter estimated miles) | | 120 | 1200 | 300 | 300 | 180 | | | 2,100.00 | |
| Mileage Reimbursement rate: | \$0.55 | \$ 66.00 | \$ 660.00 | \$ 165.00 | \$ 165.00 | \$ 99.00 | \$ - | \$ - | \$ 1,155.00 | |
| Total Subs | | \$ 2,200.00 | \$ 135,300.00 | \$ 107,250.00 | \$ 26,400.00 | \$ 66,000.00 | \$ - | \$ - | \$ 337,150.00 | |
| Total ODCs | | \$ 1,221.00 | \$ 5,720.00 | \$ 1,897.50 | \$ 1,897.50 | \$ 181.50 | \$ - | \$ - | \$ 10,917.50 | |
| Total Subs and ODCs by Task | | \$ 3,421.00 | \$ 141,020.00 | \$ 109,147.50 | \$ 28,297.50 | \$ 66,181.50 | \$ - | \$ - | \$ 348,067.50 | |

| Lab Analysis Detail | | | | | | | | | Total |
|----------------------------------|--------|------------------|-------------|-------------------|-------------|-------------------------|-----------------------------|------|-------------|
| Analysis | Rate | Task d.10.1 | Task d.10.2 | Task d.10.3 | Task d.10.4 | Task d.10.5 | Task d.10.6 | - | |
| | | Pre Construction | Drilling | Well Installation | Development | Wellhead Completion and | Construction Administration | - | |
| Orange Coast Analytical 3/05 | | | | | | | | | |
| TRPH 418.1 | \$ 75 | | | | | | | | 0 |
| 8015 gas | \$ 45 | | | | | | | | 0 |
| 8015 Total Carbon Chain | \$ 45 | | | | | | | | 0 |
| VOCs 8260 | \$ 125 | | 20 | | | | | | 20 |
| PAHs (8100/8310) | \$ 135 | | | | | | | | 0 |
| BTEX 8021B (+/- MTBE) | \$ 45 | | | | | | | | 0 |
| SVOCs 8270 | \$ 250 | | | | | | | | 0 |
| PCBs 8082 | \$ 110 | | | | | | | | 0 |
| Pesticides Organochlorine 8081 | \$ 110 | | | | | | | | 0 |
| Pesticides Organophosphorus 8141 | \$ 175 | | | | | | | | 0 |
| CAM Metals (6010/7470/7471) | \$ 140 | | | | | | | | 0 |
| 0 | \$ - | | | | | | | | 0 |
| Total Lab by Task | | \$ - | \$ 2,500.00 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 2,500.00 |

Cost Estimate (d.10.1 thru d.10.6)

| Task Totals, Contingencies and Rounding | | Project Tasks | | | | | | | Total |
|--|--|------------------|---------------|-------------------|--------------|--------------------------------------|-----------------------------|------|---------------|
| | | Task d.10.1 | Task d.10.2 | Task d.10.3 | Task d.10.4 | Task d.10.5 | Task d.10.6 | - | |
| | | Pre Construction | Drilling | Well Installation | Development | Wellhead Completion and Improvements | Construction Administration | - | |
| Labor Total | | \$ 3,260.00 | \$ 36,670.00 | \$ 8,770.00 | \$ 8,770.00 | \$ 3,910.00 | \$ 23,610.00 | \$ - | \$ 84,990.00 |
| Communications Fee (on labor) 0% | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Subs Total | | \$ 2,200.00 | \$ 135,300.00 | \$ 107,250.00 | \$ 26,400.00 | \$ 66,000.00 | \$ - | \$ - | \$ 337,150.00 |
| ODC Total | | \$ 1,221.00 | \$ 5,720.00 | \$ 1,897.50 | \$ 1,897.50 | \$ 181.50 | \$ - | \$ - | \$ 10,917.50 |
| Task Total | | \$ 6,681.00 | \$ 177,690.00 | \$ 117,917.50 | \$ 37,067.50 | \$ 70,091.50 | \$ 23,610.00 | \$ - | \$ 433,057.50 |
| Contingency Percentage | | 10% | 10% | 10% | 10% | 10% | 0% | 0% | |
| Contingency Amount | | \$ 668.10 | \$ 17,769.00 | \$ 11,791.75 | \$ 3,706.75 | \$ 7,009.15 | \$ - | \$ - | \$ 40,944.75 |
| Adjusted Task Total | | \$ 7,349.10 | \$ 195,459.00 | \$ 129,709.25 | \$ 40,774.25 | \$ 77,100.65 | \$ 23,610.00 | \$ - | \$ 474,002.25 |
| Round to nearest: (enter 0.01, 0.1, 1, 10, 100, 1000) | | \$100.00 | | | | | | | |
| | | \$ 7,300.00 | \$ 195,500.00 | \$ 129,700.00 | \$ 40,800.00 | \$ 77,100.00 | \$ 23,600.00 | \$ - | \$ 474,000.00 |

CHANGE ON SUMMARY SHEET

DO NOT CHANGE 1/1 OR 1/3/03 NUMBERS - ONLY CUSTOM

| Labor Categories | Standard | | Custom |
|------------------------------------|----------|----------|-----------|
| | 01/00/00 | 01/00/00 | 1/1/2012 |
| (ES9) Senior Principal | \$0 | \$0 | \$ 240.00 |
| (ES8) Principal Engineer-Scientist | \$0 | \$0 | \$ 235.00 |
| (ES7) Senior Engineer-Scientist | \$0 | \$0 | \$ 225.00 |
| (ES6) Senior Associate Eng-Sci | \$0 | \$0 | \$ 200.00 |
| (ES5) Associate Eng-Scientist | \$0 | \$0 | \$ 180.00 |
| (ES4) Engineer-Scientist | \$0 | \$0 | \$ 165.00 |
| (ES3) Senior Staff Eng-Scientist | \$0 | \$0 | \$ 150.00 |
| (ES2) Staff Engineer-Scientist | \$0 | \$0 | \$ 130.00 |
| (ES1) Engineer-Scientist 1 | \$0 | \$0 | \$ 125.00 |
| Designer/Senior Tech. | \$0 | \$0 | \$ 135.00 |
| (CAD-Tech.) Drafter/Technician | \$0 | \$0 | \$ 105.00 |
| Project Administrator | \$0 | \$0 | \$ 95.00 |
| (Admin. Asst.) Word Processor | \$0 | \$0 | \$ 80.00 |
| (Aide) Non-Technical | \$0 | \$0 | \$ 60.00 |
| Direct Expenses | 0% | 0% | 10% |
| Communications Fee (on labor) | 0% | 0% | 0% |
| Mileage | \$0.00 | \$0.00 | \$ 0.55 |



1150 West Trenton Avenue
Orange, CA 92867
Tel (714) 744-2990 Fax (714) 744-2991

Proposal: 12-545R
of Pages: 2

Quote for Drilling Services

To: Nadine Stroud
Company: Kennedy/Jenks Consultants
Fax: (619) 293-7920
Tel: (619) 243-2811

From: Diego Torices
Project: Rialto, CA.
Timing: TBD
Date: July 6, 2012

Scope:

- . Installation of one (1) 6" stainless steel/LCS Mud Rotary well to 880 ft, with 375 ft of stainless steel well screen
- . Drill 7-7/8" pilot hole to 1000 ft, collecting soil samples through discharge line - Backfill/Grout Well To 880ft
- . Ream borehole with 12 1/4" bit to 880ft in preparation for well installation
- . Soil samples retrieved with split-spoon sampling equipment will be charged as time and material
- . Containment of drilling mud/fluids, soil cuttings, purge & decon water in client supplied roll-off bins & tanks
- . All generated containerized materials left on site for transportation & disposal by others
- . Drill rig and supporting equipment/materials left over well location until well installation is completed
- . Well Development by air lift, bail, swab and pump methods utilizing a 5T Smeal Development Rig
- . Installation of dedicated submersible pump & motor as directed by client utilizing a Smeal 5T development rig

Plumbing of discharge lines and hard wiring of electrical - to include pressure tank switch - provided by others

Work hours are assumed 7:00 am to 5:00 pm - Monday thru Friday

Weekend work hours - as required - are portal to portal - surcharge rates apply

Usable water source for duration of project to be arranged with and/or provided by client

All well permits, encroachment permits and site access for drilling equipment - provided by others

Sound proofing panels, blankets & structured frame (if required) Not included in estimate project total

Prevailing wages - NOT included in the estimated project total

| Item | Description | Unit | Estimated Quantity | Unit Price | Extension |
|----------|---|------|--------------------|------------|-------------|
| 1 | Mobilization/Demobilization | | | | |
| | IR TH100 Mud Rotary Drill Rig, Support Trucks & Crew | Each | 1 | \$5,000.00 | \$5,000.00 |
| | Daily Drill Crew Travel | Trip | 25 | \$300.00 | \$7,500.00 |
| 2 | 6" Stainless Steel Well Installation - Mud Rotary | | | | |
| | Mud Rotary Rig Setup & Temporary Surface Casing | L.S. | 1 | \$1,500.00 | \$1,500.00 |
| | Drill Pilot Hole 7-7/8" - Sampling Through Discharge Line | Foot | 1000 | \$35.00 | \$35,000.00 |
| | Backfill/Abandonment Of 7 7/8" bore hole | Foot | 120 | \$18.00 | \$2,160.00 |
| | Ream Pilot Hole - 12-7/8" For Well Installation | Foot | 880 | \$30.00 | \$26,400.00 |
| | Collect Split Spoon Soil Samples As Directed (est) | Hour | - | \$350.00 | - |
| | Split Spoon Liners, (2" x 6") Caps & Teflon (est) | Each | - | \$15.00 | - |
| | Geophysical Logging services (water well suite) | Each | 1 | \$3,750.00 | \$3,750.00 |
| | Drill Rig Hourly Rate/Standby For E-Logging (est 6hrs) | Hour | 6 | \$350.00 | \$2,100.00 |
| | Drilling Fluid Change Out & Decon Of Tooling/Equipment | Hour | 20 | \$350.00 | \$7,000.00 |
| | Installation of Well Casing and Annular Materials | Foot | 880 | \$15.00 | \$13,200.00 |
| | 6" SCH 40 LCS Blank Casing and Centralizers | Foot | 455 | \$35.00 | \$15,925.00 |
| | 6" SCH 10 Stainless Steel Blank Casing and Centralizers | Foot | 50 | \$67.00 | \$3,350.00 |
| | 6" Stainless Steel Wire-Wrap Screen and Centralizers | Foot | 375 | \$91.00 | \$34,125.00 |
| | Dissimilar Mechanical Connector | Each | 1 | \$1,975.00 | \$1,975.00 |
| | Annular Material - Sand, Bentonite Seals and Grout To Surface | Foot | 880 | \$16.00 | \$14,080.00 |
| | Install 12" Monument Riser With Security Lid On 4' x 4' Pad | Each | - | \$650.00 | - |
| | Install 4" Security Bollars around Monument Riser (est. 6) | Each | - | \$125.00 | - |
| 3 | Rental Equipment and Miscellaneous | | | | |
| | Water Truck, Decon Unit & Support Trucks | Day | 25 | \$275.00 | \$6,875.00 |
| | Forklift and Tilt Hoppers 1st Day | L.S. | 1 | \$450.00 | \$450.00 |
| | Forklift and Tilt Hoppers - 28 Day Cycle | L.S. | 1 | \$3,000.00 | \$3,000.00 |
| | Site Fencing Enclosure & Portable Restroom (28 day cycle) | LS | 1 | \$1,200.00 | \$1,200.00 |
| | Drill Site Security Guard (12 hour shift - nights) | Hour | 350 | \$35.00 | \$12,250.00 |
| | Sound Proofing Panels, Blankets & Frame Structure (if required) | - | - | cost +15% | - |
| | Premium Time 3-Man Crew Over 10hrs On-Site | Hour | 10 | \$90.00 | \$900.00 |
| | Premium Time 3-Man Crew Weekend/Night Work - Surcharge | Hour | 50 | \$90.00 | \$4,500.00 |
| | Prevailing Wage Surcharge Rates - 3 - Man Crew | Hour | - | \$105.00 | - |
| | Drill Rig Hourly Standby Rate | Hour | - | \$350.00 | - |

| Item | Description | Unit | Estimated | Unit Price | Extension |
|--|---|------|-----------|------------|-----------------------|
| | | | Quantity | | |
| 4 | Installation Of One CNI 36" x 48" x 36" 1-Piece Easy Lift Cover Well Vault - Unit# SP3648/36EZ | | | | |
| | 36" x 48" x 36" CNI Well Vault With Easy Lift - Single Hinge Door | Each | 1 | \$3,875.00 | \$3,875.00 |
| | Vault Installation To Include: | L.S. | 1 | \$2,000.00 | \$2,000.00 |
| | Digging Of Trench Area For Placement Of Vault | | - | | - |
| | Gravel Backfill For Annulus Area To Within ~2ft bgs. | | - | | - |
| | Concrete Skirt ~9" Wide x ~2ft Thick Around Vault | | | | |
| | Gravel/Concrfete Bottom Of Inside Vault Area Around Well | | | | |
| 5 | Well Development By Air Lift, Bail, Swab & Pump Methods | | | | |
| | Mob/Demob Of 5T Smeal Development Rig & 1-Man Crew | Trip | 5 | \$275.00 | \$1,375.00 |
| | Well Development (est. 8 - 10hrs on site per day) | Hour | 45 | \$150.00 | \$6,750.00 |
| | Additional Technician - Assist With Air Lifting Of Well | Hour | 20 | \$45.00 | \$900.00 |
| | Air Lifting Tooling/Materials - (pipe, compressor, hoses) | Day | 2 | \$850.00 | \$1,700.00 |
| | Decontamination Trailer | L.S. | 1 | \$500.00 | \$500.00 |
| | 55 Gal. Containment Drums (as required) | Each | - | \$47.00 | - |
| | Premium Time 1-Man Crew Over 8hrs On-Site | Hour | 5 | \$30.00 | \$150.00 |
| | Premium Time 1-Man Crew Weekend/Night Work - Surcharge | Hour | - | \$30.00 | - |
| | Prevailing Wage Surcharge Rates - 1- Man Crew | Hour | - | \$35.00 | - |
| 6 | Dedicated Pump Installation | | | | |
| | Mob/Demob Of 5T Smeal, 20ft Support Truck & 2-Man Crew | L.S. | 1 | \$750.00 | \$750.00 |
| | 2 Man Crew - Dedicated Pump Installation (on-site hours) est. | Hour | 10 | \$195.00 | \$1,950.00 |
| 7 | Pump Equipment And Materials | | | | |
| | Grundfos Pump End - 16S50-38 (16gpm - 750ft head) 1 1/4" Outlet | Each | - | \$1,150.00 | - |
| | Franklin 4 Inch Motor End - 5HP 460V Three Phase | Each | - | \$940.00 | - |
| | Stainless Steel Pump Shroud - Used on 4 Inch Motor In 6 Inch Well | Each | - | \$550.00 | - |
| | Grundfos Pump End - 40S150-37DS (40gpm - 780ft head) 2" Outlet | Each | 1 | \$3,915.00 | \$3,915.00 |
| | Franklin 6 Inch Motor End - 15HP 460V Three Phase | Each | 1 | \$1,925.00 | \$1,925.00 |
| | Submersible Jacketed Lead 3-Wire 12-AWG (for 5HP) | Foot | - | \$1.07 | - |
| | Submersible Jacketed Lead 3-Wire 8-AWG (for 15HP) | Foot | 850 | \$2.15 | \$1,827.50 |
| | 1 1/4 Inch Galvanized Drop Pipe W/ Galvanized Couplings | Foot | - | \$4.50 | - |
| | 1 1/4 Inch Stainless Steel Drop Pipe W/ Stainless Steel Couplings | Foot | - | \$15.75 | - |
| | 2 Inch Galvanized Drop Pipe W/ Galvanized Couplings | Foot | - | \$6.25 | - |
| | 2 Inch Stainless Steel Drop Pipe W/ Stainless Steel Couplings | Foot | 850 | \$21.00 | \$17,850.00 |
| | 3/16 Inch Stainless Steel Safety Cable | Foot | 860 | \$1.05 | \$903.00 |
| | Well Seal - 6 Inch Well Casing x 1 1/4 Inch Drop Pipe | Each | 1 | \$25.00 | \$25.00 |
| | Well Seal - 6 Inch Well Casing x 2 Inch Drop Pipe | Each | 1 | \$30.00 | \$30.00 |
| | Special Fabrication 1" Thick Flanged Elbow In-Vault Landing Plate | L.S. | 1 | \$375.00 | \$375.00 |
| | Siemens 460V Control Box | Each | 1 | \$950.00 | \$950.00 |
| Estimated Working Days To Complete Drilling & Well Installation | | | | | 25 - Work Days |
| Estimated Working Days To Complete Well Development & Pump Installation | | | | | 6 -Work Days |
| Estimated Project Total | | | | | \$249,990.50 |

Notes: BC2 assumes that other parties will provide site access, drilling and well permits, on-site water supply and clear the location of utilities on the property. Drill rig hourly rates will be charged for all standby time and for time associated with returning to previously-drilled boreholes. BC2 is not responsible for damage to underground improvements.

Client is responsible for all Road and Lane Closure Permits and Equipment.

Client is responsible for naming BC2 Environmental on USA Dig Alert Ticket as the excavating contractor.